

Microsemi Corporation

November 5, 2015

Product/Process Change Notification No: PCN1505

Change Classification: Major

Subject: Transfer of Assembly Support of Various BGA Packages from Amkor Korea (ATK4) to Amkor Philippines (ATP3)

Description of Change

Devices listed in [Appendix A](#) will have the assembly support transferred from ATK4 to ATP3 facility.

Reason for Change

Microsemi's SoC assembly sub-contract facility, Amkor, will discontinue the support of plastic BGA packages with Corner Gate Mold Process (CGM) at its ATK4 facility, and will consolidate BGA with CGM mold process at its ATP3 facility starting from **January 01, 2016**.

Application Impact

ATP3 and ATK4 facilities use the same set of materials, and have identical process controls.

There is no impact to end-customer applications. There is no change in form, fit, and function as a result of this assembly support transfer.

Microsemi SoC has been using both ATK4 and ATP3 for the assembly of devices in BGA packages for at least 10 years. This transfer is only to consolidate to ATP3 those devices utilizing the Corner Gate molding process currently being assembled at ATK4.

Method of Identifying Changed Product

The country from which the units were assembled is marked on the top side of the package. Those assembled at Korea are marked KOR while those to be built in the Philippine facility are marked PHL.

Products Affected by this Change

Refer to [Appendix A](#) for affected products.

Production Shipment Schedule

Shipping of products assembled in ATP3 facility may start by **January 10, 2016**.

Full production at ATP3 is expected to start with date code: 1601. However, earlier devices use on initial assembly at ATP3 may have an earlier date code marking.

After **January 10, 2016**, Microsemi SoC may ship product built from ATK4 and/or ATP3 based on the inventory availability.

Qualification Data

As per the guidance by JEDEC standard JESD471, the movement of product manufacturing from one location to another where the new location is already qualified for the same process and techniques requires only completion of manufacturability test at the new location.

The initial production at ATP3 will be monitored to ensure smooth transition and no manufacturability concern.

The ATP3 facility has been running for various BGA products of Microsemi SoC for many years already. The products to be transferred from ATK4 to ATP3 are an addition to Microsemi devices that are already being assembled in ATP3.

Contact Information

If you have further questions related to this topic, contact Microsemi's Technical Support at soc_tech@microsemi.com.

Regards,

Microsemi Corporation

Any projected dates in this PCN are based on the most current product information at the time this PCN is being issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information, please contact your local Microsemi Sales Office, the factory contact shown above, or your local distributor.

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Appendix A: Devices to be Supported from ATK4 to ATP3

A54SX32-1BG313	AFS1500-1FG676	AX1000-2FG676	AX2000-2FG1152
A54SX32-1BG313I	AFS1500-1FG676I	AX1000-2FG676HW	AX2000-2FG1152I
A54SX32-1BG313M	AFS1500-1FGG676	AX1000-2FG676I	AX2000-2FG1152M
A54SX32-1BG329	AFS1500-1FGG676I	AX1000-2FG676M	AX2000-FG1152M
A54SX32-1BG329I	AFS1500-2FG676	AX1000-2FG676PM60	AX2000-FG1152PP
A54SX32-1BG329M	AFS1500-2FG676I	AX1000-1FG676	AX2000-FG1152X140
A54SX32-1BGG329	AFS1500-FFG676	AX1000-1FG676I	AX2000-FG1152X146
A54SX32-1BGG329I	AFS1500-FG676X266	AX1000-1FG676M	AX2000-FG896
A54SX32-1BGG329M	AFS1500-FG676X273	AX1000-1FG676MX157	AX2000-FG896ES
A54SX32-2BG313	AFS1500-FG676X52	AX1000-1FG676PI66	AX2000-FG896IPN45
A54SX32-2BG313I	M1AFS1500-1FGG676	AX1000-1FG676PM92	AX2000-FG896IX140
A54SX32-2BG313PP	M1AFS1500-1FGG676I	AX1000-1FG896	AX2000-FG896IX218
A54SX32-2BG329	M1AFS1500-FFG676	AX1000-1FG896I	AX2000-FG896IX6
A54SX32-2BG329I	M1AFS1500-FFGG676	AX1000-1FG896M	AX2000-FG896M
A54SX32-2BG329IX11	1F1500-FGG676ESX266	AX1000-1FG896X192	AX2000-1FG1152
A54SX32-2BG329IX28	AFS1500-2FGG676	AX1000-1FGG676	AX2000-1FG1152I
A54SX32-2BG329IX3	AFS1500-2FGG676I	AX1000-1FGG676I	AX2000-1FG1152M
A54SX32-2BG329IX94	AFS1500-FFGG676	AX1000-1FGG676M	AX2000-1FG896
A54SX32-2BG329PP	AFS1500-FG676	AX1000-1FGG896	AX2000-1FG896I
A54SX32-2BG329X3	AFS1500-FG676ES	AX1000-1FGG896I	AX2000-1FG896IX218
A54SX32-2BG329X366	AFS1500-FG676I	AX1000-1FGG896M	AX2000-1FG896M
A54SX32-2BG329X45	AFS1500-FG676IX266	AX1000-2FG676X89	AX2000-1FG896PPX102
A54SX32-2BGG329	AFS1500-FGG676	AX1000-2FG896	AX2000-1FG896X28
A54SX32-2BGG329I	AFS1500-FGG676ES	AX1000-2FG896I	AX2000-1FG896X3
A54SX32-3BG313	AFS1500-FGG676I	AX1000-2FG896M	AX2000-1FGG1152
A54SX32-3BG313I	AFS1500-FGG676IX266	AX1000-2FG896XM05	AX2000-1FGG1152I
A54SX32-3BG329	AFS1500-FGG676X266	AX1000-2FG896XM35	AX2000-1FGG1152M
A54SX32-3BG329I	AFS1500-FGG676X273	AX1000-2FGG676	AX2000-1FGG896
A54SX32-3BGG329	AFS1500-FGG676X52	AX1000-2FGG676I	AX2000-1FGG896I
A54SX32-3BGG329I	M1AFS1500-1FG676	AX1000-2FGG896	AX2000-1FGG896M
A54SX32A-1BG329	M1AFS1500-1FG676I	AX1000-2FGG896I	AX2000-2FG896
A54SX32A-1BG329I	M1AFS1500-2FG676	AX1000-3FG676	AX2000-2FG896I
A54SX32A-1BG329M	M1AFS1500-2FG676I	AX1000-3FG676I	AX2000-2FG896M
A54SX32A-1BGG329	M1AFS1500-2FGG676	AX1000-3FG676X89	AX2000-2FG896PJ16
A54SX32A-1BGG329I	M1AFS1500-2FGG676I	AX1000-3FG896	AX2000-2FG896PK23
A54SX32A-1BGG329M	M1AFS1500-FG676	AX1000-3FG896I	AX2000-2FG896PP
A54SX32A-2BG329	M1AFS1500-FG676ES	AX1000-3FG896X140	AX2000-2FG896PPPI46
A54SX32A-2BG329I	M1AFS1500-FG676I	AX1000-FG676	AX2000-2FG896PPX102
A54SX32A-2BG329IX94	M1AFS1500-FGG676	AX1000-FG676ENG	AX2000-2FG896PPX89
A54SX32A-2BG329PK71	M1AFS1500-FGG676ES	AX1000-FG676ES	AX2000-2FG896X146
A54SX32A-2BG329PK72	M1AFS1500-FGG676ESX266	AX1000-FG676ESX51	AX2000-2FG896X28

A54SX32A-2BGG329	M1AFS1500-FGG676I	AX1000-FG676ESX52	AX2000-2FGG1152
A54SX32A-2BGG329I	M1AFS1500-FGG676X266	AX1000-FG676I	AX2000-2FGG1152I
A54SX32A-BG329	M7AFS1500-1FG676	AX1000-FG676IX218	AX2000-2FGG896
A54SX32A-BG329HW	M7AFS1500-1FG676I	AX1000-FG676M	AX2000-2FGG896I
A54SX32A-BG329I	M7AFS1500-1FGG676	AX1000-FG676PI34	AX2000-3FG1152
A54SX32A-BG329M	M7AFS1500-1FGG676I	AX1000-FG676PP	AX2000-3FG1152I
A54SX32A-BG329ORT	M7AFS1500-2FG676	AX1000-FG676X140	AX2000-3FG896
A54SX32A-BG329PG65	M7AFS1500-2FG676I	AX1000-FG676X146	AX2000-3FG896I
A54SX32A-BG329PG99	M7AFS1500-2FGG676	AX1000-FG676X52	AX2000-FG1152
A54SX32A-BG329PH35	M7AFS1500-2FGG676I	AX1000-FG676X89	AX2000-FG1152ES
A54SX32A-BG329PI15	M7AFS1500-FFG676	AX1000-FG896	AX2000-FG1152I
A54SX32A-BG329PI16	M7AFS1500-FFGG676	AX1000-FG896ENG	AX2000-FG896EXP
A54SX32A-BG329PI83	M7AFS1500-FG676	AX1000-FG896ES	AX2000-FG896I
A54SX32A-BG329PI85	M7AFS1500-FG676I	AX1000-FG896ESX51	AX2000-FG896IES
A54SX32A-BG329PL79	M7AFS1500-FGG676	AX1000-FG896I	AX2000-FG896IEXP
A54SX32A-BG329PL87	M7AFS1500-FGG676I	AX1000-FG896IES	AX2000-FG896IORT
A54SX32A-BG329PM01	P1AFS1500-FG676ES	AX1000-FG896M	AX2000-FG896MPN45
A54SX32A-BG329PM42	P1AFS1500-FGG676ES	AX1000-FG896PJ77	AX2000-FG896ORT
A54SX32A-BG329PM43	P1AFS1500-FGG676ESX266	AX1000-FG896PK07	AX2000-FG896PJ86
A54SX32A-BG329PP	P1F15-FGG676ESX266	AX1000-FG896PP	AX2000-FG896PP
A54SX32A-BG329X110	-	AX1000-FG896X140	AX2000-FG896PPX102
A54SX32A-BG329X48	-	AX1000-FG896X146	AX2000-FG896X102
A54SX32A-BG329X53	-	AX1000-FG896X3	AX2000-FG896X140
A54SX32A-BGG329	-	AX1000-FG896X89	AX2000-FG896X146
A54SX32A-BGG329I	-	AX1000-FGG676	AX2000-FG896X3
A54SX32A-BGG329M	-	AX1000-FGG676I	AX2000-FG896X52
A54SX32A-FBG329	-	AX1000-FGG676M	AX2000-FG896X52X146
A54SX32A-FBG329PG66	-	AX1000-FGG896	AX2000-FG896X89
A54SX32A-FBG329PG93	-	AX1000-FGG896I	AX2000-FGG1152
A54SX32A-FBGG329	-	AX1000-FGG896M	AX2000-FGG1152I
A54SX32-BG313	-	AX1000-2FG896MPO73	AX2000-FGG1152M
A54SX32-BG313I	-	AX1000-2FG896PL92	AX2000-FGG896
A54SX32-BG313M	-	AX1000-2FG896PM13	AX2000-FGG896I
A54SX32-BG313PD11	-	AX1000-2FG896X183	AX2000-FGG896M
A54SX32-BG313PD12	-	AX1000-2FG896X193	AX2000-1FG896IX3
A54SX32-BG313PE02	-	AX1000-2FG896XL92	AX2000-FGG896MXY70
A54SX32-BG313PF72	-	-	A54SX32-2BG329IX45
A54SX32-BG313PF90	-	-	AX2000-FG896X130
A54SX32-BG313PP	-	-	AX2000-1FG896IX339
A54SX32-BG329	-	-	AX2000-1FGG896IX339
A54SX32-BG329I	-	-	-
A54SX32-BG329M	-	-	-
A54SX32-BG329PE06	-	-	-

A54SX32-BG329PF71	-	-	-
A54SX32-BG329PP	-	-	-
A54SX32-BGG329	-	-	-
A54SX32-BGG329I	-	-	-
A54SX32-BGG329M	-	-	-
A54SX32A-3BG329	-	-	-
A54SX32A-3BG329I	-	-	-